INTERNET DOCUMENT INFORMATION FORM

A. Report Title: Inside Logistics – Exploring The Heart of Logistics. Collocating air Force Weaspn systems Inventory With the Defense Logistics Agency Premium Service Facility

B. DATE Report Downloaded From the Internet: October 18,1999

C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #): DEPARTMENT OF THE AIR FORCE
AIR FORCE JOURNAL OF LOGISTICS
501 WARD STREET
GUNTER ANNEX
MAXWELL AFB, AL 36114-3236

D. Currently Applicable Classification Level: Unclassified

E. Distribution Statement A: Approved for Public Release

F. The foregoing information was compiled and provided by:
DTIC-OCA Initials: __pm__ **Preparation Date OCTOBER 18, 1999**

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Collocating Air Force Weapon Systems Inventory with the Defense Logistics Agency Premium Service Facility

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With declining defense budgets and the inherent responsibility as stewards of taxpayer dollars, the Services must continue to search for more efficient processes while ensuring the mission can be accomplished. As a result of the Reagan military buildup and subsequent military drawdown, the Services have been tasked to *right size* based on new force structure and inventories. In 1990, Defense Management Report Decision 987 directed the Services to set specific inventory reduction goals.[1] The Air Force was tasked to reduce its inventory level by $21B over 12 fiscal years.[2] One way the Air Force has chosen to reduce costs but maintain warfighting capabilities in the logistics arena is by transitioning from a supply or inventory-based system to a transportation-based system. This article explores the possibility of improving the average order and ship time (O&ST) of Air Force-managed secondary items (spares) through the concept of collocating them with commercial carrier transportation hubs such as Federal Express (FedEx) in Memphis, Tennessee. Though quantification is not yet a science in Air Force materiel management, the Air Force spares value has been estimated in the range of $40M to $60M per day of inventory. With inventory values of this nature, collocating assets with commercial express carrier hubs may present an opportunity for significant savings.

Air Force weapon system secondary item (spares) inventory requirements are computed by Air Force Materiel Command (AFMC) item managers (IMs). These assets are designated in the wholesale system through the use of budget codes. Budget code 8 delineates secondary items for replenishment, while budget code 15 is for procurement of initial spares for a weapon system. These reparable assets make up more than 90 percent of the Air Force inventory value.[3] Among many other factors, they utilize mean time between failure, condemnation, and average O&ST rates. These computations determine the quantity of spares necessary to support a weapon system at predetermined and fiscally palatable in-commission rates. Obligation authority to purchase spares inventory is granted in the budget cycle by Congress to AFMC through the Supply Management Activity Group (SMAG) of the Air Force Working Capital Fund (revolving fund). Customers buy parts from this revolving fund (SMAG) with directly appropriated operations and maintenance (O&M) funds. These funds replenish the SMAG giving it the capability of paying for repairs or replacing the unserviceable/condemned item when necessary. The cost of the item to the customer is determined in part by storage/shipping charges as well as the cost of maintaining the inventory.

If the transportation leg of O&ST could be reduced beyond current levels, the computation model should, in turn, reduce spares requirements, lower overall weapon systems support costs, and free O&M funds for other Air Force needs. The Secretary of Defense's Strategic Logistics Plan outlines goals to dramatically reduce cycle times.[4] Reducing O&ST is in direct support of meeting this goal.

The Air Force has recognized the need to reduce O&ST for several years and has taken dramatic steps to this end. For instance, the Air Force Deputy Chief of Staff for Installations and Logistics and his Logistics Board of Advisors made the conscious decision in 1996 to require all shippers to use commercial express carriers to move spares from the warehouse to customers and from customers to the repair depots.[5] As a result of this decision and subsequent policy implementation, the Air Force realized nearly $800M in inventory cost avoidance over a 3-year period.[6] These savings took into account an inventory buy reduction as well as an approximate $25M annual increase in transportation costs to support express carrier use. This is accomplished by reducing the transportation leg of the overarching O&ST and is possible through significant improvements in commercial carrier capabilities and reduction in transportation costs. For instance, some commercial carriers such as Federal Express boast a 98 percent plus on-time delivery rate while keeping customer costs relatively low.[7] Another benefit of using the commercial express carrier is a guaranteed on-time delivery. In the event of a service failure (less than 2 percent), under the terms of the General Services Administration (GSA) contract with FedEx, the customer is refunded charges associated with the shipment.[8]

Warehousing Processes

Currently, most Air Force-managed assets are warehoused at either Defense Logistics Agency (DLA) warehouses or at individual Air Force bases. The following will examine the fundamentals of the wholesale (DLA) and retail (base) warehousing processes.

Defense Logistics Agency

The DLA is responsible for receiving, warehousing, and shipping of Air Force managed or repaired assets transiting each of the Air Force-owned air logistics centers (ALCs). The ALCs use SMAG funds to pay DLA for receiving, warehousing, and shipping services heretofore referred to as *line charges*.

Following the typical asset through the supply pipeline begins with procurement from the vendor. Once the item manager determines buy requirements and funding availability, the order is placed with the vendor. The vendor may be directed to ship assets directly to the consumer (base) or DLA warehouses at the ALCs. When receiving a shipment, DLA warehouses the item and charges a predetermined discrete cost per item (line charge) determined by its physical characteristics. For instance, DLA discriminates between medium bulk receipts and heavy/heavy bulk or hazardous material receipts.[9] These line charges are not assessed for each item received but for each shipment. To elaborate, if a vendor ships ten items in a single shipment with the same national stock number in a carton with

the unit of issue designated by the Air Force as each, DLA would assess a single line charge based on the bulk or hazardous characteristic of the asset. If, however, the same vendor shipped the same assets in ten separate boxes as ten distinct shipments, the Air Force would be charged for ten receipts. In addition to receipted shipments, DLA charges the Air Force in the same manner based on the same principles for issues or shipments.

An additional charge is assessed when DLA issues or ships an item. On- and off-base issues are discriminated between in line charge determination.[10] For unserviceable spares (returned from the consumer vice the vendor) or assets requiring modification, the IM will direct DLA through the AFMC wholesale system to issue the asset to an on-base repair facility. Since there is no commercial transportation required, the line charge for this issue is substantially lower than an off-base issue. DLA's management information system recognizes and adjusts billing based on the different types of issues.

Once the item is repaired, the Air Force depot repair facility requests DLA rewarehouse the item again, and an additional receipt charge is assessed. Finally, once a retail customer places a demand on the wholesale system, the item is either released automatically or flagged for item manager review and then released based on requisition priority. Depending on the point in the duty day the requisition enters the system and the priority of the requisition, the *electrons could be batched* for release later in the day or the next duty day. This presents a problem when trying to reduce O&ST and frequently results in at least one additional O&ST day when compared with the DLA Premium Service option.

Line charges are standardized for all DLA distribution depots regardless of consignment destination or origin. All line charges are assessed through the SMAG to the retail customer in the ultimate *selling price* of the asset. A memorandum of understanding between the Air Force and DLA requires DLA use commercial express carriers for transportation of most weapon systems spares. Excluded from this requirement are those consigned to hard-to-service countries/locations (for example, Turkey or Diego Garcia) where customs or austere commercial service presents problems.[11]

Air Force Retail Accounts

From a retail perspective, most base supply warehouses are managed as a base operating support (BOS) function. Under this structure, all overhead costs associated with receiving and warehousing budget code 8 and 15 assets are borne by BOS and funded directly with O&M dollars. When an asset arrives from DLA or another base in the case of a lateral shipment, base supply receives, stores, or issues it to the customer (maintenance) with no charge assessed for overhead. The customer does, however, pay the price set in the SMAG, including the line charges assessed by DLA. Once it becomes unserviceable through weapon system use, the customer returns it to supply for carcass value credit, and it is immediately released from supply to the traffic management office (TMO) for shipment. The TMO ensures proper packaging and ships the asset to the ALC (or contract repair facility) using SMAG funds and commercial express carriers.[12] This shipment cost is also considered when determining the retail (SMAG) price of the item.

Federal Express Premium Service

Federal Express operates a worldwide warehousing and distribution system focusing on time-definite delivery of small- to medium-sized packages. While most of their business involves packages weighing less than 150 pounds, they are capable of moving much heavier packages. Most packages transiting through the continental United States (CONUS) are sorted through the FedEx hub near Memphis, Tennessee. DLA and GSA recognize the high quality and value of the FedEx operation and have modified business practices to incorporate their services.

As a result of the National Performance Review, DLA took action to establish a reinvention lab to look at the possibility of outsourcing receiving, warehousing, and shipping to third-party logistics providers. The culmination of this initiative was the creation of the Premium Service facility whereby DLA partnered with FedEx in Memphis to provide these services to Department of Defense (DoD) customers.[13] Currently, this facility is managing more than 5,000 specific national stock numbers (NSNs) for the DoD in a 120,000-square-foot facility adjacent to the FedEx hub.[14] DLA lauds the program as the ". . . fastest, most reliable and customer-oriented distribution channel in the Department of Defense, offering time-definite transportation service for critical, mission essential items."[15] One of the major benefits of the program is the ability for a customer to place an order as late as midnight and have the asset delivered to its door in the CONUS by 10:30 a.m. the next morning. According to DLA, ". . . for West Coast customers, the additional times to place orders for parts or equipment is like having an additional day's worth of inventory."[16] As of June 1998, Premium Service had supported more than 120,000 requisitions with an inventory accuracy rate reported at 99.99 percent and on-time delivery rate of 99.2 percent.[17] These results translate into satisfied customers and a potential for further inventory reductions and savings. As a Premium Service customer, a Naval Inventory Control Point study concluded the CONUS O&ST over a 3-month sampling period averaged a mere 17 hours with a worldwide 98.48 percent on-time delivery.[18]

The customer order process does not change when using Premium Service. For Air Force weapon systems inventory, the retail customer places a Military Standard Transportation and Issue Procedures requisition into the Standard Base Supply System. This requisition passes to the wholesale system for IM determination of asset availability and release. The determination can be automated or manual depending on the criticality and worldwide availability or shortage of an asset. Once the IM has released an asset for shipment in the wholesale system, the release is passed electronically to the Premium Service Facility. A requisition entering the wholesale system during nonduty hours could potentially be en route or delivered before it normally would have been received for order filling under the current whole distribution system. This once again equates to potential inventory savings when factoring O&ST in the IM computation model.

As a result of the logistics lessons learned in Operations Desert Shield and Desert Storm, the DoD mandated that the Services and DoD agencies improve in-transit visibility of assets. Customers should have the access and ability to determine, at any given point in time after a requisition is generated, the status of their requisition in the supply pipeline. Premium Service, through the Defense Automatic Addressing System Center, provides a daily status to the Air Force Advance Tracking and Control and Global Transportation Network.[19] In addition, as with any FedEx shipment, if the customer knows the FedEx tracking number, its location can be determined through the use of the FedEx worldwide web-tracking site by calling a toll free number in the CONUS.

Another potential benefit Premium Service affords is the ability to determine when stockage is low and request replenishment. This is accomplished through coordination with the IMs at service inventory control points that set minimum reorder levels. Once the level is reached, the IM is contacted and a request made to replenish the stock.[20] In an efficiently operating wholesale system, the IM should be able to predict an approximate replenishment requirement date and set procurement and depot maintenance lead times to backfill stock levels without Premium Service notification.

It is important to note DLA's Premium Service contract with FedEx requires a minimum 99 percent inventory accuracy level. For an additional charge, customers can request FedEx conduct wall-to-wall physical inventories as needed. With a documented actual 99.99 percent inventory accuracy rate, this added expense appears unnecessary.

Customs clearance in the past has been a problem for overseas customers using commercial express carriers. Working closely with the Air Force, FedEx has solved most of these issues. With the advent of a United States Transportation Command and Air Mobility Command initiative called Worldwide Express (WWX), customs issues are primarily the carrier's responsibility. WWX is a DoD mandatory use contract for packages moving to, from, or between overseas locations. Shipments moving under this contract have maximum weight and size limitations. Though certainly not the only carrier performing under this multiyear contract, FedEx was awarded the lion's share of the contract requirements. Under WWX, FedEx is the only commercial express carrier supporting all four designated regions of the world: European, Pacific, Central, and Southern theaters. In fact, FedEx is the only WWX contract carrier with service into South America.[21] FedEx's overwhelming participation in WWX and success in solving most customs issues enhances the concept of placing Air Force assets in the Premium Service facility.

As alluded to earlier, GSA solicited and awarded a CONUS small package contract to FedEx. This is also a mandatory use contract for all DoD shippers for shipments weighing less than 150 pounds; originating in the CONUS; meeting specific maximum size limits (length, width, and height dimensions); and with consignors in the CONUS, Alaska, Hawaii, and Puerto Rico. The Navy's experience with 17-hour average CONUS delivery performance from the Premium Service facility also lends credibility to increased Air Force usage.

Premium Service Funding

Each time an asset is receipted or shipped, DLA charges the customer. There is, however, a significant difference in the line charge for off-base issues or shipments. Premium Service charges a set price when receipting an asset. When a requisition flows into Premium Service and is shipped, DLA assesses a handling charge based on the size of the item (bin or medium bulk). Differing from the line charges assessed at the distribution depots, the Premium Service handling charge does not include transportation costs. In addition to this handling charge, actual transportation charges are assessed based on the destination and applicable GSA or WWX contract rates that are aggregated to the Service customer.

For the actual funds transfer to occur, Military Interdepartmental Purchase Requests (MIPR) are generated by the Services validating maximum funds availability for Premium Service and provided to DLA. DLA, in turn, will determine and assess charges against the MIPR.

Since DLA has negotiated a long-term contract with FedEx, the line charges are not as vulnerable to rate swings as those at the DLA distribution depots. For instance, the Comptroller, in the Office of the Secretary of Defense (OSD[C]), determines, in the Program Budget Decision cycle, rates DLA will assess for services rendered.[22] These rates are fed to OSD(C) by DLA based on the previous year and projected profits and/or losses. OSD(C) adjusts or approves these rates, and the Services must then assimilate them with OSD(C)-determined increases in obligation authority. The end result is typically a price increase passed through to the Service customer and a potential reduction in available O&M funds for other uses. Premium Service provides stability to the process through long-term fixed rate contracts with FedEx coupled with long-term fixed rate contracts negotiated in the GSA and WWX contracts.

Inventory Considerations

When considering the use of the Premium Service facility, types of inventory must be explored. The Premium Service program manager does not recommend that the Services place all of their assets into the facility, but they should consider value, demand data, criticality, availability, and maturation in selection.[23]

In the weapon system acquisition process, manufacturers may develop military weapon system-unique tooling and processes in order to produce a secondary item (spare). Once the production line is terminated, the cost to reactivate the line is cost prohibitive, and the production lead time is too long for acceptable weapon system support. To ensure long-term weapon systems support, the acquisition community will opt to procure a certain amount of these assets as insurance items. This means there will be little demand due to low anticipated failure rates, but unforeseeable circumstances might arise whereby one day the asset becomes critical to weapon system support. There is no additional cost to the Air Force to warehouse these assets beyond the initial DLA receipt line charge. Utilizing Premium Service could reduce the initial provision requirements and save procurement dollars by eliminating the need for outside the CONUS (OCONUS) inventory placement and centrally warehousing these insurance items.

Other potential candidates include very expensive spares regardless of demand history. For instance, by centrally locating avionics components, IMs could reduce wholesale inventory levels. Premium Service's ability to provide the component to the customer in 17 hours in the CONUS and 48 hours outside the CONUS could potentially reduce safety stock levels and obligation authority requirements in retail accounts. While some safety stock would still be required, with rapid, time-definite resupply, on-hand retail stock reduction should also have the collateral impact of decreasing the work load for inventory sections at retail base supply accounts. In some cases, IMs cannot afford to stock adequate levels of components due to the high asset cost. By leveraging Premium Service, the computation model should reduce the requirement and improve actual weapon system support.[24]

Additional possibilities may include initial spares (budget code 15) for new weapon systems. Under the current acquisition process, spares requirements for new weapon systems are computed on anticipated mean time between failures, weapon systems use profiles, and condemnation rates. Secondary asset purchase is calculated and executed based on engineering projections vice actual rates. This procedure can drive incorrect procurement decisions resulting in over or under buying spares requirements. For example, the C-17 Globemaster III experienced lower than projected brake failures in the first few years of weapon system life. From this, one could extrapolate there were fewer than anticipated condemnations with excess assets purchased. If the initial provisioners had any doubts of the validity of the engineering estimates concerning mean time between failure, they could have used a time-definite resupply facility such as Premium Service to offset a reduced buy. Once the actual failure and condemnation rates were established, the IMs could reassess buy requirements. The potential dollar savings throughout the weapon system's life cycle in this scenario are obvious. Conversely, if a higher than anticipated usage of a secondary component at the beginning of a weapon systems life demanded a shorter pipeline due to underestimated buy requirements, Premium Service could offset the risk. A prime example of this scenario is the oil pan on the Pratt & Whitney 2000 series engine supporting the C-17. An engineering design flaw on a supporting strut caused premature cracks at the welded points and ultimate failure. This occurred at a crucial time during the beginning stages of the C-

17 airlift into Bosnia. With an extreme shortage of these oil pans, any reduction in the O&ST could have offset the potential reduced aircraft availability rates until additional pans could be procured.

The DLA Premium Service program manager also suggests viable candidates should include materiel purchased on a sole source basis or materiel that has a procurement lead-time where intensive distribution control would simplify procurement decisions.[25] Design unstable and configuration specific assets under strict engineering control might also benefit from the distribution service of the DLA/FedEx facility. By having quick access to provide a secondary item to an original manufacturer to reconfigure/modify for a design change, Premium Service could enhance asset availability and weapon systems support. Commercial off-the-shelf, nonstandard hardware and software that must be closely controlled for end item technical suitability should also be considered for placement in a Premium Service facility.

With the advent of an Expeditionary Aerospace Force concept, planners should give consideration to placing contingency stocks at this facility. The Air Force already configures Mobility Readiness Spares Packages at the retail level for quick deployment in the case of a contingency. Placement of this stock at a Premium Service facility would, however, reduce the convenience of the retail customer borrowing from these contingency kits when spares shortages exist in the noncontingency retail accounts. It is critical to note that in order for contingency stocks to be effectively distributed into a combat zone, the Air Force must have a functional Air Mobility Express and battlefield distribution operation in place.

Finally, a potential high-payoff opportunity exists to place high cost, periodically required test and support equipment at this location for quick, worldwide placement. Instead of each base or major command procuring this equipment for just-in-case or periodic use, central warehousing creates potential savings for the Air Force with little to no mission impact. There might also be an option to centrally fund procurement of these types of assets to enhance fiscal efficiency. Premium Service offers an additional benefit to the customer at no cost that might be beneficial to the Air Force with shared test equipment. By FedEx including a preprinted return airway bill, the customer (for example, precision measurement equipment laboratories and aircraft maintenance) can quickly return the asset to the storage warehouse without transiting the base supply or transportation functions. However, this would require central asset management similar to the current engine management process to ensure asset priority and accountability and may offset the fiscal benefits of such a program.

Cost Comparison

Placing wholesale assets at the Premium Service facility will certainly increase the cost of the transportation legs of the SMAG price but may be more than offset by inventory reductions. The following will provide a simple cost comparison of selected secondary components for CONUS customers using the GSA Small Package Contract pricing.[26]

At the wholesale level, line charges are assessed upon asset receipt/storage or on/off-base issue. Assuming there is an Air Force preferred on-demand repair process vice batch processing, a single asset would be assessed four line charges during a typical depot maintenance cycle upon: (1) asset receipt from the retail account, (2) issue to the depot maintenance activity, (3) asset repair and rewarehousing, and finally, (4) asset shipment to an off-base customer. Ultimately, the Air Force is working toward a process whereby the item proceeds directly to the repair facility upon receipt from the retail account. This would eliminate one of the line charges but is not currently in place at maintenance depots Air Force-wide.

	Premium Service FY 99 Rates	DLA Distribution Depot FY 99 Rates
Receipt		
Bin	$19.56	$28.72
Medium bulk	$19.56	$40.11
Heavy Bulk/Hazardous	$19.56	$53.85
Issue		
Bin	$10.61	$16.07
Medium Bulk	$10.61	$32.64
Heavy Bulk/Hazardous	$10.61	$63.16
Transportation (Of Base)		
Bin	Actual Cost	$ .89
Medium Bulk	Actual Cost	$10.52
Heavy Bulk/Hazardous	Actual Cost	$18.55

Table 1. Rate Comparisons[27]

Using fiscal year 1999 rates as outlined in Table 1, the typical 107-pound secondary asset charge by a DLA distribution depot would be as follows:

Medium bulk receipt ..... $ 40.11
Medium bulk on-base issue 32.64
Medium bulk receipt 40.11
Medium bulk off-base issue 43.16
Total $156.02

Without changes in Air Force depot repair processes, such as receipting directly for the item in the repair shop and, thereby, bypassing the DLA Distribution Depot, this cost will fluctuate only with rate adjustments. Adding the Premium Service option in the distribution process effectively creates additional warehousing and transportation bills. Using Table 1, the increased cost to the SMAG and subsequent O&M accounts for Premium Service on a typical 107-pound box would be:

Receipt $19.56
Issue 10.61
Actual Trans Charges[28] 72.25
Subtotal 102.42
Total (Incl DLA Depot) $258.44

Adding Premium Service to the distribution process represents a 66 percent increase when warehousing and shipping a 107-pound secondary item in the CONUS. A similar computation for a medium-sized, 10-pound item results in an increased warehousing and transportation cost of 42 percent while a 150-pound item increases in cost by 53 percent. For shipments consigned to an OCONUS location, a corresponding rate increase appears probable. In order for the Premium Service to be fiscally practical, inventory reductions would need to occur.

According to DLA, the Premium Service facility performance and value is best when focusing on packages weighing 150 pounds or less.[29] In addition, dimensional requirements must also be met. The maximum package dimensions for Premium Service are 165 inches total length and girth combined with no single side exceeding 119 inches.[30] Using data gleaned from the Reparable Pipeline Data Analysis Tool and Recoverable Consumption Item Requirements System (D041) by the Logistics Management Institute, there are 2,700 stock numbered spares (budget code 8 or 15) managed by the Air Force with active demand data that meet the packed weight requirement of 150 pounds or less.[31] Of these NSNs, only 2,000 meet the Premium Service dimensional requirements totaling 461,500 individual units. However, weight and dimensional data may require revalidation to verify data accuracy.

Based on the latest acquisition cost, the total value of the eligible inventory is $451.5M with an average cost per unit of $972, a surprisingly relatively low cost per unit.

Further research shows a mere 14.7 percent of the NSNs in the eligible pool accounts for 38.4 percent of the total inventory value. Furthermore, this 14.7 percent of NSNs (297) equates to only 2 percent (9,400) of total line items in the inventory. These assets represent an arbitrary minimum $5K break point using the latest acquisition cost and resulted in a high-value item at $262K.[32] This pool appears to have the highest potential for considering placement in the Premium Service facility.

Using these 297 NSNs or 9,400 line items, the computation estimates the total inventory value at $168M. With an 8.47-day average Air Force Logistics Response Time, each day O&ST for this inventory equals $19.8M. Comparing the typical DLA distribution depot process to the average Premium Service O&ST (17 hours) substantiates at least a 1-day benefit in O&ST reduction. The actual number of wholesale demands from April 1997 through March 1998 for these high-value, secondary items was 1,927. Using this as a multiplier of the delta between Premium Service and the standard DLA distribution depot rate equates to a $197,363 annual increase in transportation costs (1,927 X $102.42).

In the logistics community, the Air Force typically sets a 5-to-1 return on investment for inventory to transportation ratio. Using this pool of inventory and with a 1-day improvement in O&ST results in a 100-to-1 ratio of potential annual inventory cost avoidance to transportation cost increases, clearly an effort worth pursuing.

Retail stocks present a more difficult comparison. A correlation can be drawn, however, between wholesale stock and retail stock O&ST when determining safety levels. Additonal study is required in this area to determine potential cost savings.

Potential Drawbacks to Premium Service

If the Air Force chooses to use Premium Service for weapon systems spares, centrally locating them may present a center of gravity or target for exploitation. Particular care should be taken to ensure a sufficient quantity of each type of asset is held in reserve at the air logistics centers to offset this threat.

In addition, placing all assets with a single commercial express carrier may create an unacceptable vulnerability. FedEx and United Parcel Service have experienced problems with labor union strikes over the last several years. The Air Force, in cooperation with the affected carriers, worked to ensure the strikes had minimal impact on its shipments. However, placing all stock on the shelves at a FedEx facility might present unacceptable risks.

Inventory reduction has inherent risks that must be explored. In an *Air Force Journal of Logistics* article, Virginia A. Mattern of the Logistics Management Institute made the case where inventory reduction based on anticipated demand levels could have a disastrous impact on the Air Force in wartime.[33] A study for DLA by the Logistics Management Institute "... found that parts with historically low demands can suddenly experience high demands."[34] This could result in an exacerbated effect if inventory reductions are taken based solely on O&ST reduction. The study states, "... buying minimal stock can lead to an unexpected stock depletion that could adversely affect mission capability." This could be a notable problem in wartime.

An additional potential drawback would occur if IMs change the status of an asset from automated release in the wholesale requisition process to one requiring IM review prior to release. This flag would add O&ST and negate any fiscal or weapon systems support benefit from an O&ST perspective.

Finally, as mentioned earlier, it is crucial for the Air Mobility Express and battlefield distribution to be operationally effective in wartime. Placing contingency stocks at the Premium Service facility has little benefit if the stocks can only be moved to an airhead quickly and in a time-definite manner without the capability to make the final leg of the journey to the warfighter.

Conclusion

FedEx, in partnership with DLA, has streamlined the warehousing process as evidenced by its ability to receive a requisition and process, ship, and deliver an asset to the CONUS customer within 17 hours. Considering the increased transportation cost, not all types of inventory should be considered for placement at this facility, but some certainly make sense. The 297-item pool provides a starting point for consideration.[35] Based on potential inventory savings and enhanced warfighter support, the most logical assets to place there are high-value (more than $5K), high-payback secondary weapon systems assets. Additional research should be conducted concerning the potential of centrally warehousing retail stocks as well.

Notes

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24. *Ibid.*
25. *Ibid.*
26. *FedEx U.S. Government Contract Service Guide*, Memphis, Tennessee, 1997, 12.
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29. Gookin.
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34. *Ibid.*
35. Robert Burleson.

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Logistics is the bridge between the economy of the nation and the tactical operations of its combat forces. Obviously, then, the logistics system must be in harmony both with the economic system of the nation and with the tactical concepts and environment of the combat forces.

—Admiral Henry E. Eccles